aiwa

COMPACT DISC STEREO SYSTEM

NSX-S111
NSX-S116

OPERATING INSTRUCTIONS

En (English)

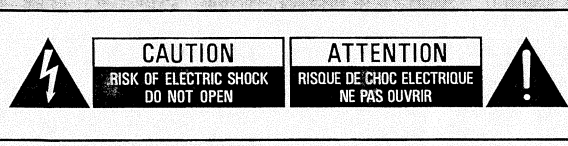
8Z-NFA-906-01
990315AKY-U-9

EZ

COMPACT disc DIGITAL AUDIO

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



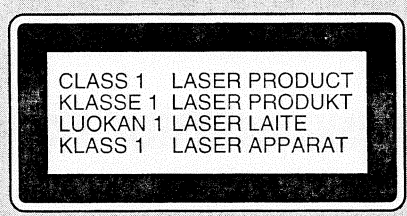
CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the exterior.



CAUTION!

Invisible laser radiation when open and inter locks defeated. Avoid exposure to beam.

ADVARSEL!
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laitteen käyttäminen muulla kuin tässä käyttöohjeessaa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteiylle.

VARNING!
Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsätta för osnylig laser-strålning, som överskrider gränsen för laserklass 1.

NOTE

AIWA CO. LTD. - JAPAN - DECLARES UNDER ITS OWN RESPONSIBILITY THAT THE PRODUCT DESCRIBED IN THIS MANUAL IS IN COMPLIANCE WITH THE DIRECTIVES OF D.M 28.8.95 No. 548, ACCORDING TO THE STIPULATIONS OF PARAGRAPH 3 OF ATTACHMENT A OF D.M. 25.6.85 AND PARAGRAPH 3 OF ATTACHMENT 1 OF D.M. 27.8.87 (REGULATIONS REGARDING FREQUENCIES).

The above information is only for Italy.

PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation

1 **Water and moisture** — Do not use this unit near water, such as near a bath, sink, swimming pool, or the like.
2 **Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
3 **Mounting surface** — Place the unit on a flat, even surface.
4 **Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from each side.
- Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
- Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.

5 **Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.
6 **Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care.
Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.
7 **Condensation** — Moisture may form on the CD pickup lens when:
- The unit is moved from a cold spot to a warm spot.
- The heating system has just been turned on.
- The unit is used in a very humid room.
- The unit is cooled by an air conditioner.

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
8 **Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

1 **Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
2 **AC power cord**
- When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
- Never handle the AC power plug with wet hands, as this could result in fire or shock.
- Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
- Avoid overloading AC power plugs and extension cords beyond their capacity, as this could result in fire or shock.

3 **When not in use** — Unplug the AC power plug from the power socket if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

Have the units serviced by a qualified service technician if:

- The AC power cord or plug has been damaged.
- Foreign objects or liquid have got inside the unit.
- The unit has been exposed to rain or water.
- The unit does not seem to operate normally.
- The unit exhibits a marked change in performance.
- The unit has been dropped, or the cabinet has been damaged.

DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

TABLE OF CONTENTS

PRECAUTIONS 2

PREPARATIONS

CONNECTIONS 4
REMOTE CONTROL 5
BEFORE OPERATION 6

SOUND

AUDIO ADJUSTMENTS 6
GRAPHIC EQUALIZER 7

TAPE PLAYBACK

BASIC OPERATIONS 7

CD PLAYING

BASIC OPERATIONS 8
PROGRAMMED PLAY 9

RADIO RECEPTION

MANUAL TUNING 10
PRESETTING STATIONS 10

RECORDING

BASIC RECORDING 11
AI EDIT RECORDING 12
PROGRAMMED EDIT RECORDING 13

CLOCK AND TIMER

SETTING THE CLOCK 14
SETTING THE SLEEP TIMER 14
SETTING THE TIMER 15

OTHER CONNECTIONS

CONNECTING OPTIONAL EQUIPMENT 16
LISTENING TO EXTERNAL SOURCES 16

GENERAL

CARE AND MAINTENANCE 17
TROUBLESHOOTING GUIDE 17
SPECIFICATIONS 18

PARTS INDEX ..... *Back cover*

En

CONNECTIONS

Check your system and accessories

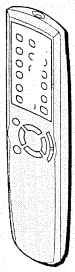
NSX-S111

CX-NS111 Compact disc stereo cassette receiver
SX-NS112 Front speakers

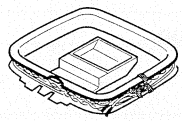
NSX-S116

CX-NS116 Compact disc stereo cassette receiver
SX-NS116 Front speakers

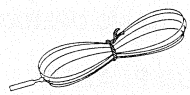
Remote control



MW/LW antenna



FM antenna



Operating Instructions, etc

Before connecting the AC cord

The rated voltage of your unit shown on the rear panel is 230 V AC. Check that the rated voltage matches your local voltage.

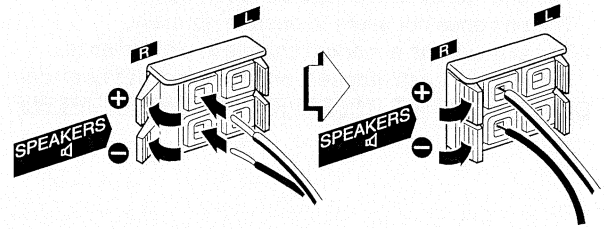
IMPORTANT

Connect the speakers, antennas, and all optional equipment first. Then connect the AC cord.

There are no differences between the front speakers. Both speakers can be connected as L (left) or R (right).

1 Connect the right and left speakers to the main unit.

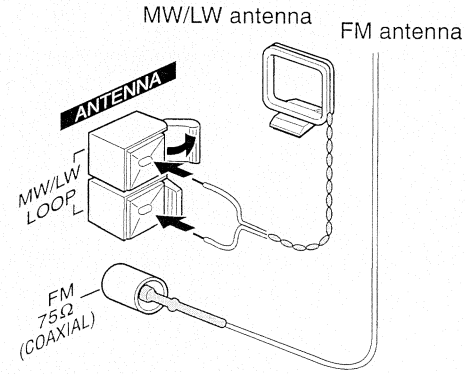
Connect the right speaker cord to **SPEAKERS R** terminals, and left to **SPEAKERS L** terminals.



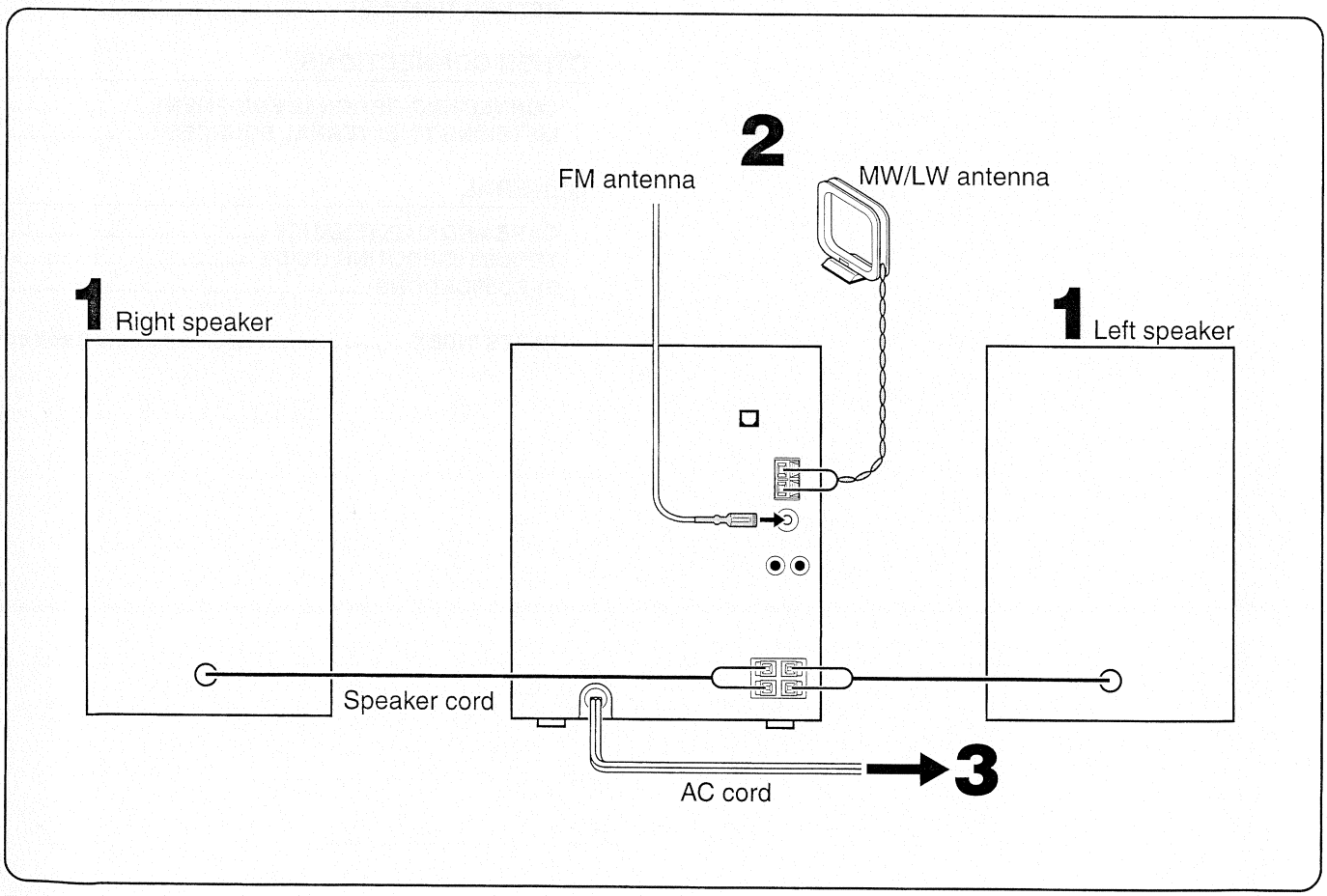
The speaker cord with the white stripe should be connected to ⊕ terminal and the black cord to ⊖ terminal.

2 Connect the supplied antennas.

Connect the FM antenna to **FM 75 Ω** terminal and the MW/LW antenna to **MW/LW LOOP** terminals.



3 Connect the AC cord to an AC outlet.



To position the antennas

FM unipolar antenna:

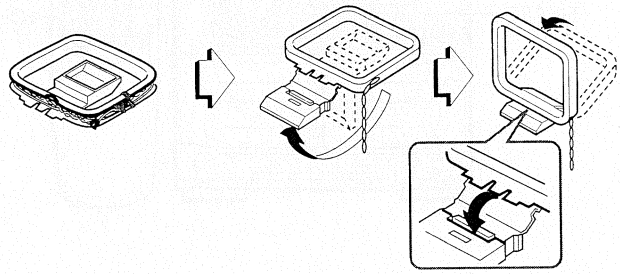
Extend fully and position for the best possible reception.
This antenna is of an instant type, so the use of an outdoor antenna is recommended.

MW/LW antenna:

Position to find the best possible reception.

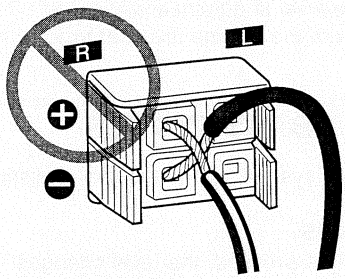
To stand the MW/LW antenna on a surface

Fix the claw to the slot.



NOTE

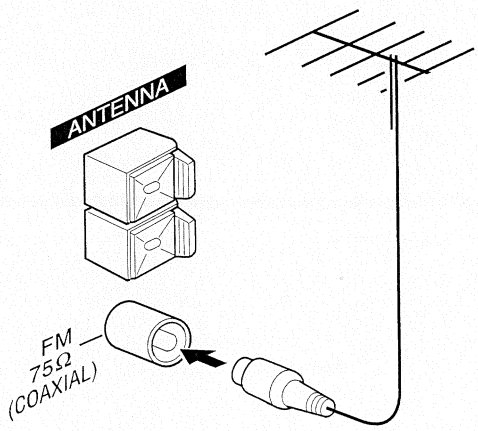
- Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in **SPEAKERS** terminals.



- Do not leave objects generating magnetism, such as credit cards, near the speakers, as these objects may be damaged.
- Do not bring the FM antenna near metal objects or curtain rails.
- Do not bring the MW/LW antenna near other optional equipment, the stereo system itself, the AC cord or speaker cords, since noise will be picked up.
- Do not unwind the MW/LW antenna wire.

CONNECTING AN OUTDOOR ANTENNA

For better FM reception, use of an outdoor antenna is recommended.
Connect the outdoor antenna to **FM 75 Ω** terminal.

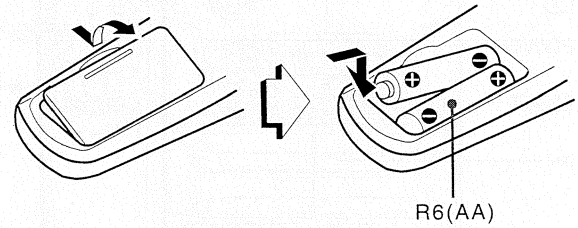


To connect other optional equipment → page 16.

REMOTE CONTROL

Inserting batteries

Detach the battery cover on the rear of the remote control and insert two R6 (size AA) batteries.



When to replace the batteries

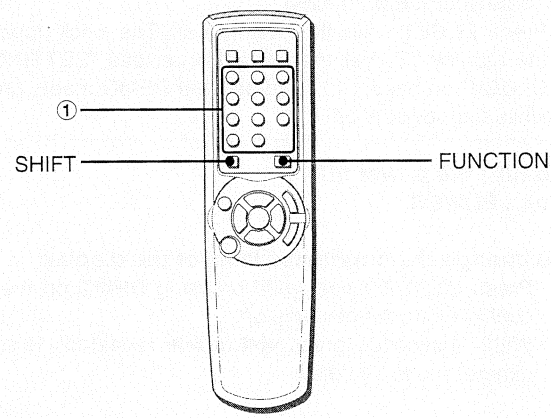
The maximum operational distance between the remote control and the sensor on the main unit should be approximately 5 meters (16 feet). When this distance decreases, replace the batteries with new ones.

To use SHIFT on the remote control

Buttons ① have two different functions. One of these functions is indicated on the button, and the other on the plate above the button.
To use the function on the button, simply press the button.
To use the function on the plate above the button, press the button while pressing **SHIFT**.

To use FUNCTION on the remote control

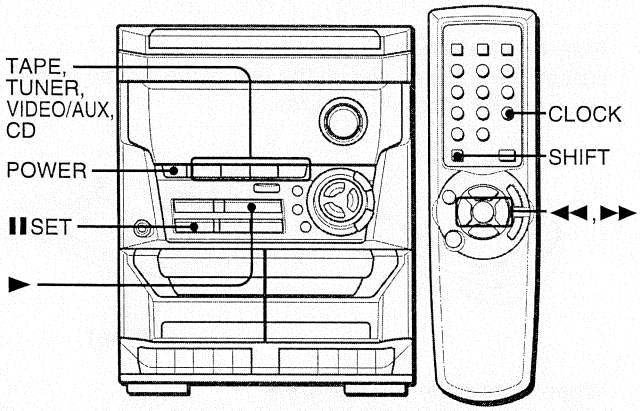
FUNCTION substitutes for the function buttons (**TAPE**, **TUNER/BAND**, **VIDEO/AUX**, **CD**) on the main unit.
Each time **FUNCTION** is pressed, the next function is selected cyclically. When tapes are inserted in both decks, each deck is selected with **FUNCTION**.



NOTE

- If the remote control is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
- The remote control may not operate correctly when:
  - The line of sight between the remote control and the remote sensor inside the display window is exposed to intense light, such as direct sunlight
  - Other remote controls are used nearby (those of a television, etc.)

BEFORE OPERATION



To turn the power on
Press one of the function buttons (**TAPE**, **TUNER**, **VIDEO/AUX**, **CD**). Playback of the inserted disc begins, or the previously tuned station is received (Direct Play Function).
POWER is also available.

NOTE
When the power is turned on, the disc compartment may open and close to reset the unit.

DEMO (Demonstration) mode
When the AC cord is connected, the display window demonstrates the functions of the unit. When the power is turned on, the DEMO display is overridden by the operation display. When the power is turned off, the DEMO mode is restored.

To cancel DEMO mode
Press **II SET** while the power is off. The clock appears on the display. (To set the current time, see "SETTING THE CLOCK" on page 14.) To re-activate DEMO mode, press ► while the power is off.

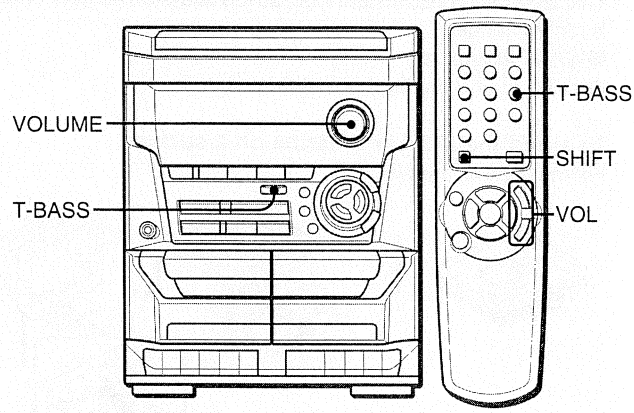
To turn the power off
Press **POWER**.

To change the brightness level of the display
1 Press **CLOCK** twice while pressing **SHIFT** on the remote control while the power is on.
2 Within 4 seconds, press ◄◄ or ►► repeatedly to select the dimmer mode as below.

DIM-OFF ⟷ DIMMER 1 ⟷ DIMMER 2

DIM-OFF: The normal display.
DIMMER 1: The illumination of the display is dimmer than usual.
DIMMER 2: The illumination of the display is dimmer than DIMMER 1.
3 Within 4 seconds, press **II SET** to set the mode.

AUDIO ADJUSTMENTS

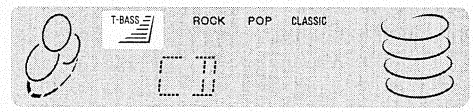


VOLUME

Turn VOLUME on the main unit, or press VOL on the remote control.
The volume level is displayed as a number from 0 to MAX (31). The volume level is automatically set to 16 when the power is turned off with the volume level set to 17 or more.

SUPER T-BASS SYSTEM

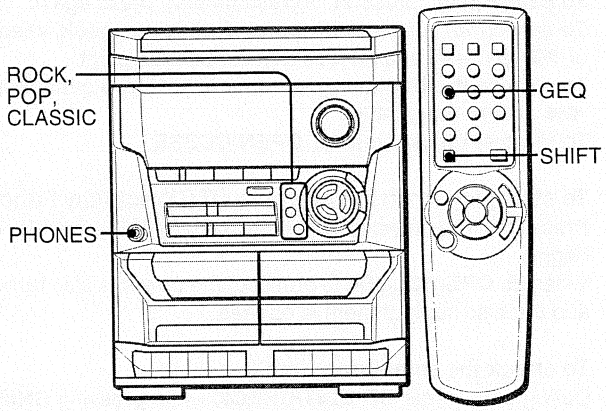
The T-BASS system enhances the realism of low-frequency sound.
Press T-BASS.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



To select with the remote control
Press **T-BASS** while pressing **SHIFT**.

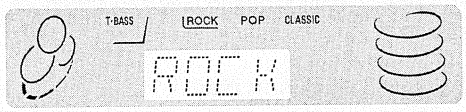
NOTE
Low frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low frequency sound is originally emphasized. In this case, cancel the T-BASS system.

GRAPHIC EQUALIZER



This unit provides the following three different equalization curves.
ROCK: Powerful sound emphasizing treble and bass
POP: More presence in the vocals and midrange
CLASSIC: Enriched sound with heavy bass and fine treble.

Press one of ROCK, POP or CLASSIC.
The selected equalization mode is displayed.



To cancel the selected mode
Press the selected button again. "GEQ OFF" is displayed.

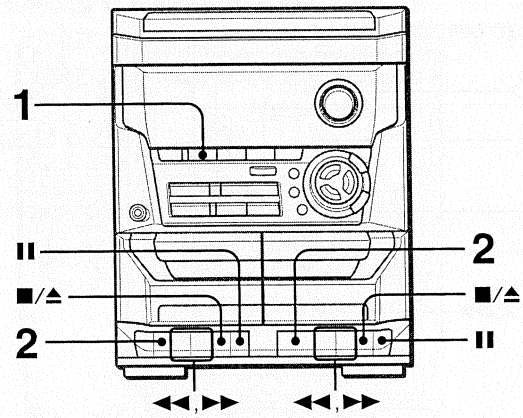
To select with the remote control
Press **GEQ** repeatedly while pressing **SHIFT**. The GEQ mode is displayed cyclically as follows.

ROCK → POP → CLASSIC → GEQ OFF (cancel)

Using the headphones
Connect headphones to the **PHONES** jack with a standard stereo plug (ø6.3 mm, 1/4 inch).
No sound is output from the speakers while the headphones are plugged in.

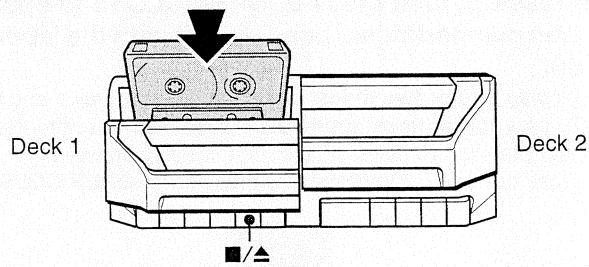
Sound adjustment during recording
The output volume and tone of the speakers or headphones are freely varied without affecting the recording.

BASIC OPERATIONS



Use type I (normal) tapes only.

1 **Press TAPE and press ■/⏏ to open the cassette holder.**



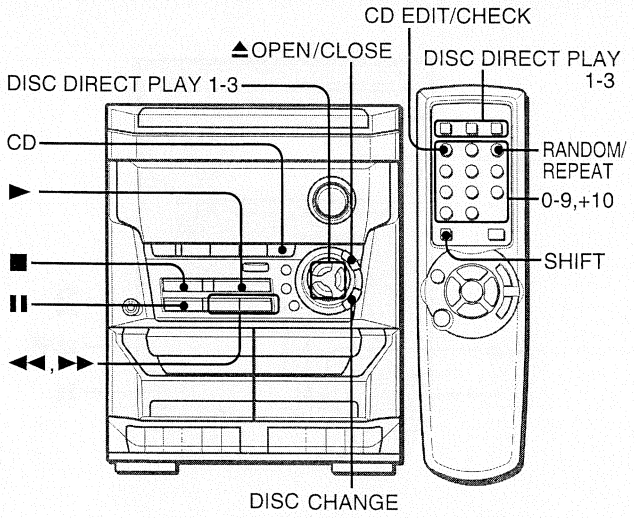
Insert a tape with the exposed side down. Push the cassette holder to close.

2 **Press ► to start play.**
Only the side facing out from the unit can be played back.

To stop play, press ■/⏏.
To pause play , press II. To resume play, press again.
To fast forward or rewind, press ◀◀ or ▶▶. Then press ■/⏏ to stop the tape.

When both deck 1 and deck 2 are set in the playback mode
Sound from deck 2 is heard.

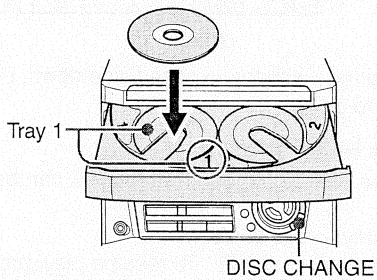
BASIC OPERATIONS



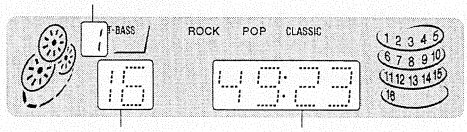
LOADING DISCS

Press CD, then press ≜ OPEN/CLOSE to open the disc compartment. Load disc(s) with the label side up.

To play one or two discs, place the discs on tray 1 and 2.
To play three discs, press **DISC CHANGE** to rotate the trays after placing two discs. Place the third disc on tray 3.
Close the disc compartment by pressing **≜ OPEN/CLOSE**.



Tray number of the disc to be played

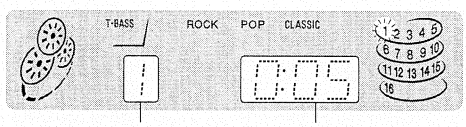


Total number of tracks Total playing time

PLAYING DISCS

Load discs.

To play all discs in the disc compartment, press ►.
Play begins with the disc on tray 1.



Number of track being played Elapsed playing time

To play one disc only, press DISC DIRECT PLAY 1-3.
The selected disc is played once.

To stop play, press ■.
To pause play, press II. To resume play, press again.
To search for a particular point during playback, keep ◄◄ or ►► pressed and release it at the desired point.
To skip to the beginning of a track during playback, press ◄◄ or ►► repeatedly.
To remove discs, press **≜ OPEN/CLOSE**.

To start play when the power is off (Direct Play Function)

Press **CD**. The power is turned on and play of the loaded disc(s) begins.
When **≜ OPEN/CLOSE** is pressed, the power is also turned on and the disc compartment is opened.

To check the remaining time

During play, press **CD EDIT/CHECK** while pressing **SHIFT** on the remote control. The amount of time remaining until all tracks finish playing is displayed. To restore the playing time display, repeat the above.

Selecting a track with the remote control

1 Press **DISC DIRECT PLAY 1-3** to select a disc.
2 Press numbered buttons **0-9** and **+10** to select a track.
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.
The selected track starts to play and continues to the end of that disc.

Replacing discs during play

While one disc is playing, the other discs can be replaced without interrupting play.
1 Press **DISC CHANGE**.
2 Remove the discs and replace with other discs.
3 Press **≜ OPEN/CLOSE** to close the disc compartment.

NOTE

- When loading an 8-cm (3-inch) disc, put it onto the inner circle of the tray.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.
- Do not use irregular shape CDs (example: heart-shaped, octagonal ones). It may result in malfunctions.

RANDOM /REPEAT PLAY

Use the remote control.

RANDOM play
All the tracks on the selected disc or all the discs can be played randomly.

REPEAT play
A single disc or all the discs can be played repeatedly.

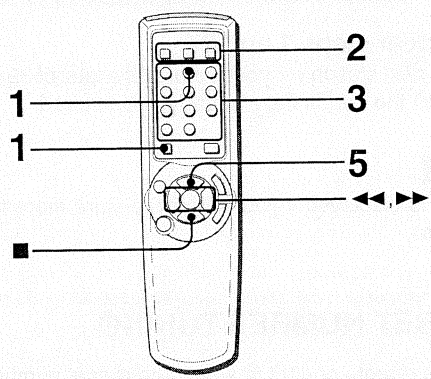
Press RANDOM/REPEAT while pressing SHIFT .
Each time it is pressed, the function can be selected cyclically.
RANDOM play — RANDOM lights up on the display.
REPEAT play — ↻ lights up on the display.
RANDOM/REPEAT play — RANDOM and ↻ light up on the display.
Cancel — RANDOM and ↻ disappear from the display.

To play all discs, press ► to start play.
To play a single disc, press one of **DISC DIRECT PLAY 1-3** to start play.

NOTE
During random play it is not possible to skip to the previously played track with ◄◄.

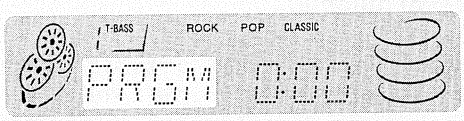
PROGRAMMED PLAY

Up to 30 tracks can be programmed from any of the inserted discs.



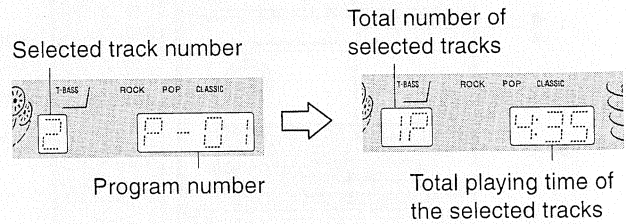
Use the remote control.

***1* Press PRGM while pressing SHIFT in stop mode.**
"PRGM" is displayed .



***2* Press DISC DIRECT PLAY 1-3 to select a disc.**
Go to the next step when the tray stops rotating.

***3* Press numbered buttons 0-9 and +10 to program a track.**
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.



***4* Repeat steps 2 and 3 to program other tracks.**

***5* Press ► to start play.**

To check the program
Each time ◄◄ or ►► is pressed in stop mode, a disc number, track number, and program number will be displayed.

To clear the program
Press ■ **CLEAR** in stop mode.

To add tracks to the program
Repeat steps 2 and 3 in stop mode. The track will be programmed after the last track.

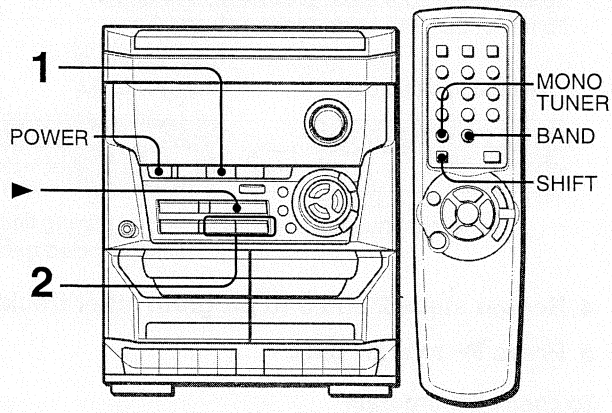
To change the programmed tracks
Clear the program and repeat all the steps again.

To play the programmed tracks repeatedly
After programming the tracks, press **RANDOM/REPEAT** repeatedly while pressing **SHIFT** until ↻ appears on the display.

NOTE
- During programmed play, you cannot perform random play, check the remaining time, and select a disc or track. "CAN'T USE" is displayed if you attempt to select a track.
- "FULL" is displayed if you attempt to program more than 30 tracks.

En

MANUAL TUNING



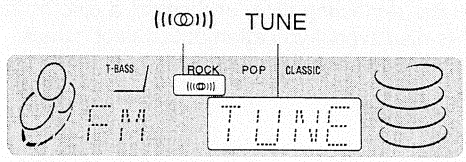
1 Press TUNER/BAND repeatedly to select the desired band.

FM → MW → LW

When **TUNER/BAND** is pressed while the power is off, the power is turned on directly.

To select a band with the remote control
Press **BAND** while pressing **SHIFT**.

2 Press ◄◄ DOWN or ►► UP to select a station.
Each time the button is pressed, the frequency changes.
When a station is received, "TUNE" is displayed for 2 seconds.
During FM stereo reception, ((◎)) is displayed.



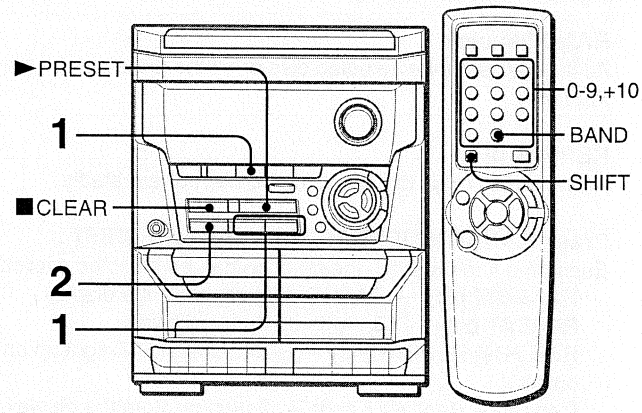
To search for a station quickly (Auto Search)
Keep **◄◄ DOWN** or **►► UP** pressed until the frequency starts to change rapidly. After tuning in to a station, the search stops.
To stop the Auto Search manually, press **◄◄ DOWN** or **►► UP**.
• The Auto Search may not stop at stations with very weak signals.

When an FM stereo broadcast contains noise
Press **MONO TUNER** while pressing **SHIFT** on the remote control so that "MONO" appears on the display.
Noise is reduced, although reception is monaural.
To restore stereo reception, press these buttons so that "MONO" disappears.

To change the MW tuning interval
The default setting of the MW tuning interval is 9 kHz/step. If you use this unit in an area where the frequency allocation system is 10 kHz/step, change the tuning interval.
Press **POWER** while pressing ►.
To reset the interval, repeat this procedure.

NOTE
When the MW tuning interval is changed, all preset stations are cleared. The preset stations have to be set again.

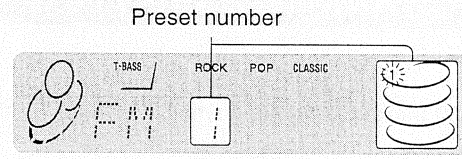
PRESETTING STATIONS



The unit can store a total of 32 preset stations. When a station is stored, a preset number is assigned to the station. Use the preset number to tune in to a preset station directly.

1 Press TUNER/BAND to select a band, and press ◄◄ DOWN or ►► UP to select a station.

2 Press ❚❚ SET to store the station.
A preset number beginning from 1 in consecutive order for each band is assigned to the station.



3 Repeat steps 1 and 2.
The next station will not be stored if a total of 32 preset stations for all the bands have already been stored.

NOTE
"FULL" is displayed if you attempt to store more than 32 preset stations.

PRESET NUMBER TUNING

Use the remote control to select the preset number directly.

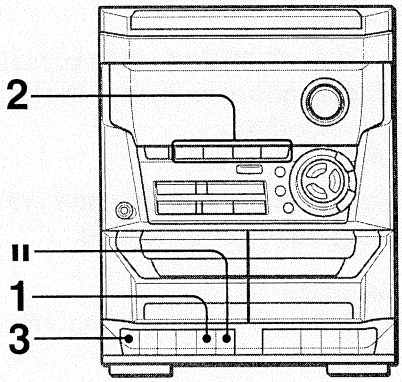
1 Press BAND while pressing SHIFT to select a band.

2 Press numbered buttons 0-9 and +10 to select a preset number.
Example:
To select preset number 20, press **+10**, **+10** and **0**.
To select preset number 15, press **+10** and **5**.

Selecting a preset number on the main unit
Press **TUNER/BAND** to select a band. Then, press **► PRESET** repeatedly.
Each time **► PRESET** is pressed, the next ascending number is selected.

To clear a preset station
Select the preset number of the station to be cleared. Then, press **■ CLEAR**, and press **❚❚ SET** within 4 seconds.
The preset numbers of all other stations in the band with higher numbers are also decreased by one.

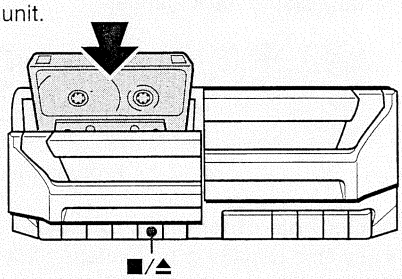
BASIC RECORDING



Preparation
- Use Type I (normal) tapes only.
- Set the tape to the point where recording will start.

1 Insert the tape to be recorded on into deck 1.

Insert the tape with the side to be recorded on first facing out from the unit.



2 Press function (CD, TAPE, TUNER or VIDEO/AUX) and prepare the source to be recorded.

To record from a CD, press **CD** and load the disc(s).
To record from a tape, press **TAPE**. Then insert the original tape into deck 2 and play it.
To record from a radio broadcast, press **TUNER/BAND** and tune in to a station.
To record from a connected source, press **VIDEO/AUX**.

3 Press ● to start recording.

► is depressed simultaneously.
When recording from a connected source, start playback of the source.
When the selected function is CD, playback and recording start simultaneously.

To stop recording, press ■/≜ on deck 1.
To pause recording, press II on deck 1. To resume recording, press it again.

NOTE

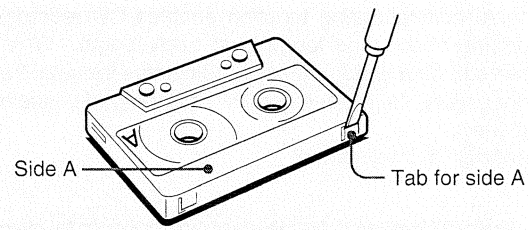
If squealing or beating sounds occur when recording an MW or LW broadcast, press **MONO TUNER** while pressing **SHIFT** on the remote control until "BEAT 1" or "BEAT 2" is displayed, so as to eliminate the noise.

To record selected tracks of the CD
Before pressing ●, program the tracks (see page 9).

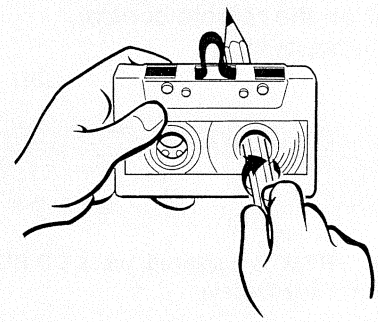
To start recording precisely (except when recording from a CD)
Before pressing ● at step 3 above, press II on deck 1. Then, press ●. The deck enters recording pause mode. To restart recording, press II again.

To record part of the CD
When ● is pressed, recording always starts from the first track. To start in the middle of a track, play the CD first and press II for CD at the point to start recording from. Then, press ●. The pause mode for CD is released automatically and recording starts.

About cassette tapes
- **To prevent accidental erasure**, break off the plastic tabs on the cassette tape after recording with a screwdriver or other pointed tool.



To record on the tape again, cover the tab openings with adhesive tape, etc.
- **120-minute or longer tapes** are extremely thin and easily deformed or damaged. They are not recommended.
- **Take up any slack in** the tape with a pencil or similar tool before use. Slack tape may break or jam in the mechanism.



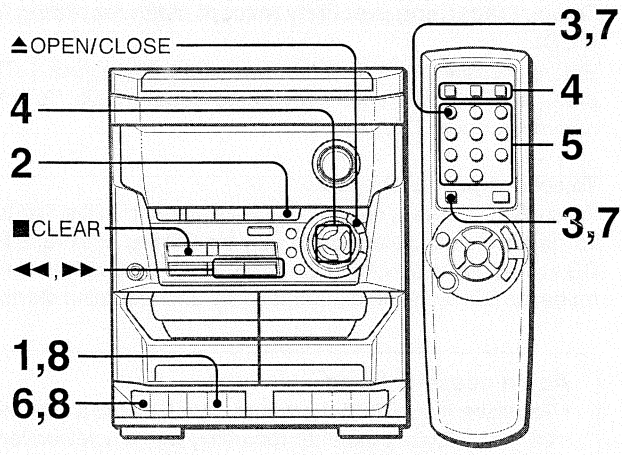
NOTE

Do not press the buttons on deck 2 during recording.

Sound adjustment during recording
The output volume and tone of the speakers or headphones are freely varied without affecting the recording.

To erase a recording
1 Insert the tape to be erased into deck 1 and press **TAPE**.
2 Set the tape to the point where the erasure is to be started.
3 Press ● to start the erasure.

AI EDIT RECORDING

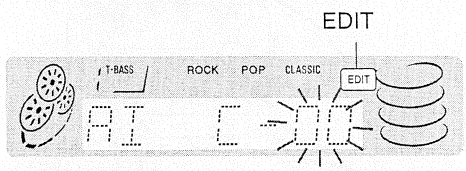


The AI edit recording function enables CD recording without worrying about tape length and track length. When a CD is inserted, the unit automatically calculates the total track length. If necessary, the order of tracks is rearranged so that no track is cut short.
(AI: Artificial Intelligence)

***1* Insert the tape to be recorded on into deck 1, and wind up to the beginning of the front side.**
Press ■/≜ to open the cassette holder and insert the tape with the exposed side down. Wind up the tape with ◄◄.

2 Press CD and load the disc(s).

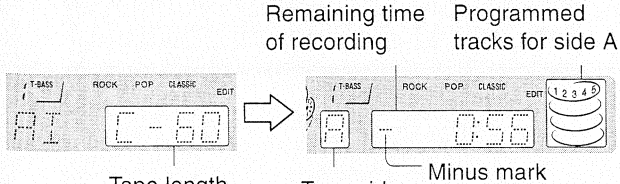
***3* Press CD EDIT/CHECK once while pressing SHIFT on the remote control.**
"EDIT" is displayed.



- When "PRGM" is displayed, press **CD EDIT/CHECK** while pressing **SHIFT** again.

***4* Press DISC DIRECT PLAY 1-3 to select a disc.**

***5* Press numbered buttons 0-9 on the remote control to designate the tape length.**
10 to 99 minutes can be specified.
Example: When using a 60-minute tape, press **6** and **0**.
In a few seconds, the tracks to be recorded on each side of the tape are determined.
- ◄◄ and ►► are also available to designate the tape length.



A: First recording side
B: Second recording side

***6* Press ● on deck 1 to start recording on the first side.**
CD play and recording of edited tracks for the first side start simultaneously. When the end of the tape is reached, deck 1 enters the recording stop mode. After entering the recording stop mode, go to step 7.

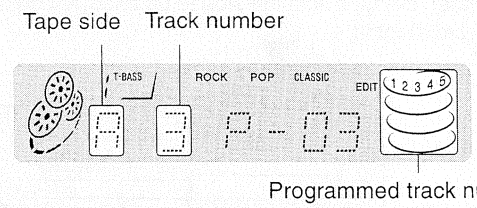
***7* Press CD EDIT/CHECK while pressing SHIFT on the remote control to display the program for the second recording.**
"B" is displayed.

***8* Turn over the tape in deck 1 and press ● to start recording on the second side.**

To stop recording
Press ■/≜ on deck 1. Recording and CD play stop simultaneously.

To clear the edit program
Press ■ **CLEAR** for CD twice in stop mode so that "EDIT" disappears on the display or ≜ **OPEN/CLOSE** for CD.

To check the order of the programmed track numbers
Before recording, press **CD EDIT/CHECK** while pressing **SHIFT** on the remote control to select side A or B, and press ◄◄ or ►► repeatedly.

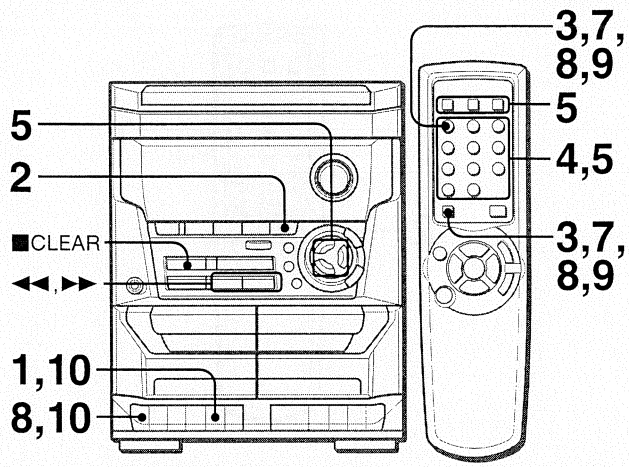


To add tracks from other discs to the edit program
If there is any time remaining on the tape after step 5, you can add tracks from other discs in the CD compartment .
1 Press **CD EDIT/CHECK** while pressing **SHIFT** on the remote control to select side A or B.
2 Press **DISC DIRECT PLAY 1-3** to select a disc.
3 Press numbered buttons on the remote control to select tracks. A track whose playing time is longer than the remaining time cannot be programmed.
4 Repeat steps 2 and 3 to add more tracks.

Time on cassette tapes and editing time
The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

NOTE
The AI edit recording function cannot be used with discs containing 31 tracks or more. "TR OVER" is displayed if this is attempted.

PROGRAMMED EDIT RECORDING



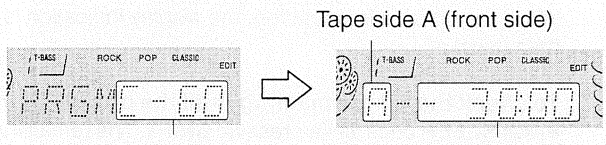
In the programmed edit recording function the tracks can be programmed while checking the remaining time on each side of the tape.

1 **Insert the tape into deck 1.**
Insert the tape with the side to be recorded on first facing out from the unit. Wind up the tape with ◄◄.

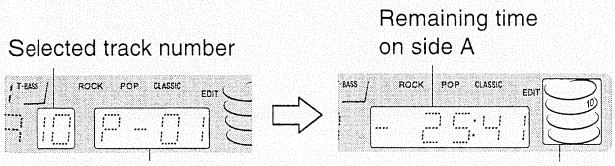
2 **Press CD and load the disc(s).**

3 **Press CD EDIT/CHECK twice while pressing SHIFT on the remote control.**
"EDIT" and "PRGM" are displayed.
- When "AI" is displayed, press **CD EDIT/CHECK** while pressing **SHIFT** again.

4 **Press numbered buttons on the remote control to designate the tape length.**
10 to 99 minutes can be specified.
- The ◄◄ and ►► are also available to designate the tape length.

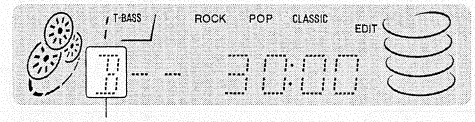


5 **Press DISC DIRECT PLAY 1-3 to select a disc. Then, press numbered buttons 0-9 and +10 on the remote control to program a track.**
Example: To select the 10th track of disc 2, press **DISC DIRECT PLAY 2**, then press **+10** and **0**.



6 **Repeat step 5 for the rest of the tracks for side A.**
A track whose playing time is longer than the remaining time cannot be programmed.

7 **Press CD EDIT/CHECK while pressing SHIFT on the remote control to select side B and program the tracks for side B.**
After confirming "B" on the display, repeat step 5.



Tape side B (reverse side)

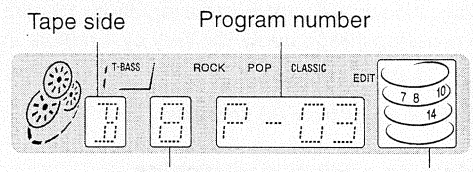
8 **Press CD EDIT/CHECK while pressing SHIFT on the remote control to select side A and press ● to start recording.**
CD play and recording of edited tracks for the first side start simultaneously. When the end of tape is reached, deck 1 enters the recording stop mode. After entering the recording stop mode, go to step 9.

9 **Press CD EDIT/CHECK while pressing SHIFT on the remote control for recording of the second side.**
"B" is displayed.

10 **Turn over the tape in deck 1 and press ● to start recording.**
Recording starts.

To stop recording
Press ■ /⏏ on deck 1. Recording and CD play stop simultaneously.

To check the order of the programmed track numbers
Before recording, press **CD EDIT/CHECK** while pressing **SHIFT** on the remote control to select side A or B, and press ◄◄ or ►► repeatedly.

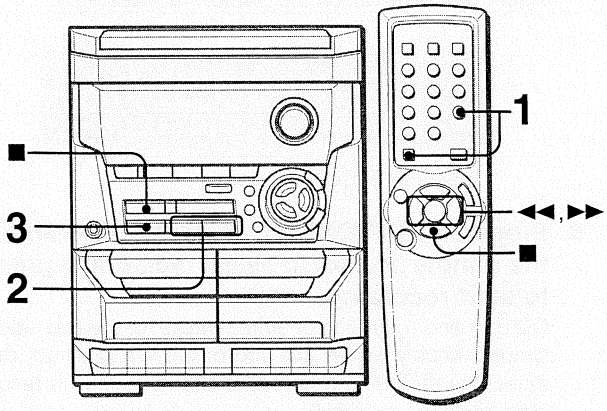


To change the program of each side
Press **CD EDIT/CHECK** while pressing **SHIFT** on the remote control to select side A or B, and press ■ **CLEAR** to clear the program on the selected side. Then program tracks again.

To clear the edit program
Press ■ **CLEAR** twice so that "EDIT" disappears on the display.

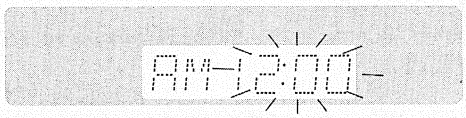
NOTE
- Up to 30 tracks can be programmed from any of the inserted discs.
- "FULL" is displayed if you attempt to program more than 30 tracks.

SETTING THE CLOCK



The clock is displayed. (The ":" between the hours and minutes flashes.) When the power cord is plugged into an AC outlet for the first time after purchase or when the clock setting is canceled due to a power failure, the entire clock display flashes.

1 Press CLOCK while pressing SHIFT.



2 Within 4 seconds, press ◀◀ or ▶▶ to designate the hour and the minute.
Pressing either button changes both the hour and the minute. Holding it down will vary the time rapidly by 10-minute interval, and pressing it repeatedly will vary by 1 minute interval.

3 Press II.
The clock starts from 00 seconds.

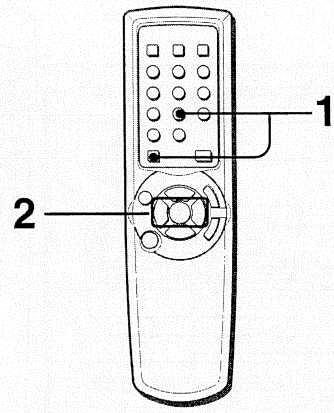
To restore an original clock setting
Press **CLOCK** while pressing **SHIFT** on the remote control before completing step 3 to restore the previous time setting. This cancels any new setting.

To view the clock when another display is in the display
Press **CLOCK** while pressing **SHIFT** on the remote control. The time is displayed for 4 seconds and then the original display reappears. However, the clock cannot be displayed during recording.

To switch to the 24-hour standard
Press **CLOCK** while pressing **SHIFT** on the remote control and then press ■ within 4 seconds.
Repeat the same procedure to restore the 12-hour standard.

If the clock display flashes
If the display flashes when the clock is displayed, it indicates that the clock has stopped due to a power failure or the removal of the power cord. The current time needs to be reset.

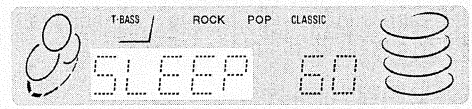
SETTING THE SLEEP TIMER



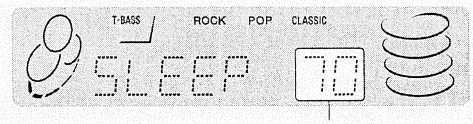
The unit can be turned off automatically at a specified time.

Use the remote control.

1 Press SLEEP while pressing SHIFT.



2 Within 4 seconds, press ◀◀ or ▶▶ to specify the time until the power is turned off.
The time changes between 5 and 240 minutes in 5-minute steps.



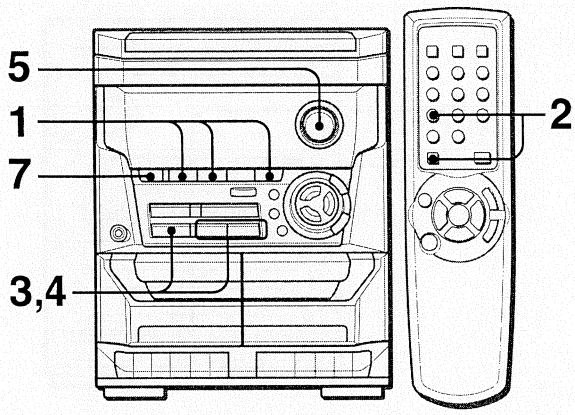
Specified time

While the timer is in operation, the display indication is dimmer than usual.

To check the time remaining until the power is turned off
Press **SLEEP** once while pressing **SHIFT**. The remaining time is displayed for 4 seconds.

To cancel the sleep timer
Press **SLEEP** twice while pressing **SHIFT** so that "SLEEP oFF" appears on the display.

SETTING THE TIMER

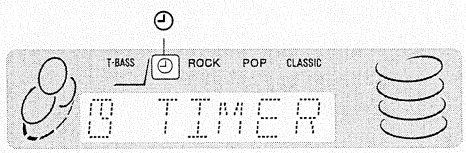


The unit can be turned on at a specified time every day with the built-in timer.

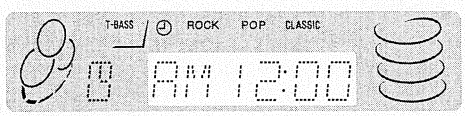
Preparation
Make sure the clock is set correctly.

1 **Press one of the function buttons to select a source.**
- If **TUNER/BAND** is pressed, the band cannot be selected in this step.

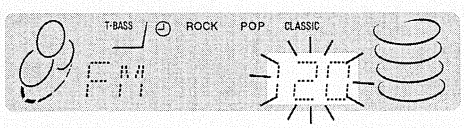
2 **Press TIMER while pressing SHIFT on the remote control so that ⏲ appears on the display.**
Time and audio source name flash alternately.



3 **Within 6 seconds, press ◀◀ or ▶▶ to designate the timer-on time, then press ❚❚.**
Pressing either button changes both the hour and the minute. Holding it down will vary the time rapidly by 10-minute interval, and pressing it repeatedly will vary by 1 minute interval.



4 **Within 4 seconds, press ◀◀ or ▶▶ to select the duration for the timer-activated period.**
The duration can be set between 5 and 240 minutes in 5-minute steps.



The duration will be automatically set after 4 seconds. It will also be set if ❚❚ is pressed within 4 seconds after step 4.

5 **Adjust the volume.**
The source sound will play at the volume level set in this step when the power is turned on by the timer.
If the volume level is set to 17 or higher, however, it will automatically be set to 16 when the power is turned on.

6 **Prepare the source.**
To listen to a CD, load the disc to be played first on tray 1.
To listen to a tape, insert the tape into deck 1 or 2.
To listen to the radio, tune in to a station.

7 **Press POWER to turn off the power.**
When the timer-on time is reached, the unit turns on and begins play with the selected source.

8 **Get ready for the tape function or the timer recording.**
To listen to the tape, press ▶.
To record the source, press ● on deck 1.

When the timer-on time is reached, the unit turns on and begins play with the selected source. While the timer is in operation, the display indication is dimmer than usual.

NOTE
You can change the source that was selected in step 1 by pressing one of the function buttons before pressing ❚❚ in step 3.

The timer recording period and tape length
When the length of the tape to be recorded is shorter than the timer recording period, ● on deck 1 is released before the timer is off.
When the tape length is longer than the timer recording period, ● is not released. If ● is not released for a long time, the tape in the deck may be damaged. Press ■/⏏ to release ●.

To check the timer setting
Press **TIMER** while pressing **SHIFT** on the remote control.
The selected source, the timer-on time, and the duration for the timer-activated period will be displayed for 4 seconds.

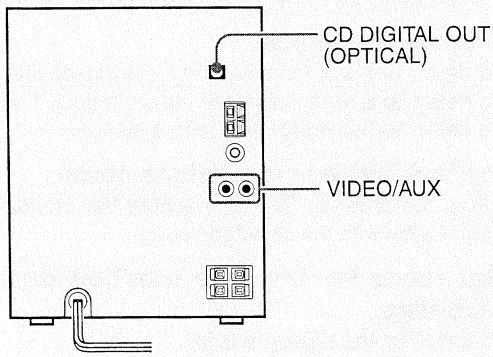
To change any of the previous setting
Carry out from step 1.
However, if you do not change the timer-on time, in step 3 just press ❚❚ twice and continue from step 4.

To cancel the timer standby mode temporarily
Press **TIMER** repeatedly while pressing **SHIFT** on the remote control to display "⏲ OFF".
To restore the timer standby mode, press again to display ⏲.

Using the unit while the timer is set
You can use the unit normally after setting the timer.
Before turning off the power, check whether the contents in step 5 and 6 are set as you wish, turn off the power and carry out step 8 if necessary.

NOTE
- Timer playback will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this unit. Use an external timer.

CONNECTING OPTIONAL EQUIPMENT



Refer to the operating instructions of the connected equipment for details.

- The connecting cords are not supplied. Obtain the necessary connecting cords.
- Consult your local Aiwa dealer for optional equipment.

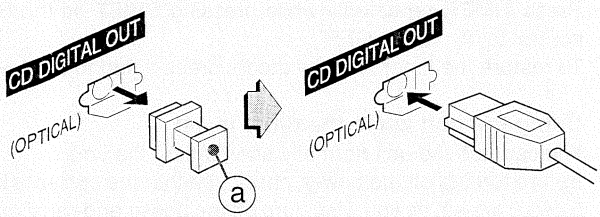
VIDEO/AUX JACKS

This unit can input analogue sound signals through these jacks. Use a cable with RCA phono plugs to connect audio equipment (turntables, LD players, MD players, VCRs, TV, etc.).
Connect the red plug to the **VIDEO/AUX R** jack, and the white plug to the **VIDEO/AUX L** jack.

When connecting a turntable
Use an Aiwa turntable equipped with a built-in equalizer amplifier.

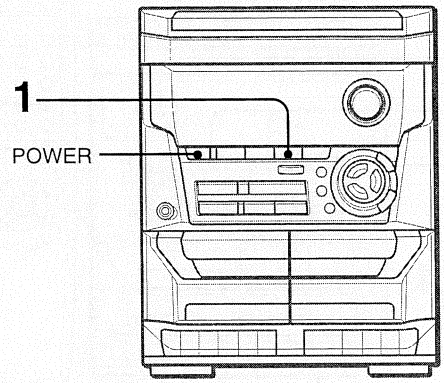
CD DIGITAL OUT (OPTICAL) JACK

This unit can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment (DAT deck, MD recorder, etc.).
Remove the dust cap ⓐ from the **CD DIGITAL OUT (OPTICAL)** jack. Then, connect an optical cable plug to the **CD DIGITAL OUT (OPTICAL)** jack.



When the CD DIGITAL OUT (OPTICAL) jack is not being used
Attach the supplied dust cap.

LISTENING TO EXTERNAL SOURCES



To play equipment connected to the VIDEO/AUX jacks proceed as follows.

1 Press VIDEO/AUX.
"VIDEO" appears on the display.

2 Play the connected equipment.

To change a source name in the display
When **VIDEO/AUX** is pressed, "VIDEO" is displayed initially. It can be changed to "VIDEO", "AUX" or "TV".
With the power on, press **POWER** while pressing **VIDEO/AUX**. Repeat the procedure to select one of the names.

CARE AND MAINTENANCE

Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet

Use a soft and dry cloth.
If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzine or thinner as these could damage the finish of the unit.

To clean the tape heads

When the tape heads are dirty;
- high frequency sound is not emitted
- the sound is not adequately high
- the sound is off-balance
- the tape cannot be erased
- the tape cannot be recorded on

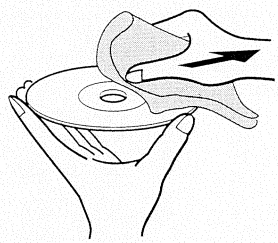
After every 10 hours of use, clean the tape heads with a head cleaning cassette.
Refer to the instructions of the cleaning cassette for details.

To demagnetize the tape heads

The tape heads may become magnetized after long-term use. This may narrow the output range of recorded tapes and increase noise.
After every 20 to 30 hours of use, demagnetize the tape heads with a separately sold demagnetizing cassette.
Refer to the instructions of the demagnetizing cassette for details.

Care of discs

- When a disc becomes dirty, wipe the disc from the centre out with a cleaning cloth.



- After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

Care of tapes

- Store tapes in their cases after use.
- Do not leave tapes near magnets, motors, television sets, or any source of magnetism. This will downgrade the sound quality and cause noise.
- Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

GENERAL

There is no sound.
- Is the AC cord connected properly?
- Is there a bad connection? (→ page 4)
- There may be a short circuit in the speaker terminals.
  → Disconnect the AC cord, then correct the speaker connections.
- Was an incorrect function button pressed?

Sound is emitted from one speaker only.
- Is the other speaker disconnected?

An erroneous display or a malfunction occurs.
→ Reset the unit as stated below.

TUNER SECTION

There is constant, wave-like static.
- Is the antenna connected properly? (→ page 4)
- Is the signal weak?
  → Connect an outdoor antenna.

The reception contains noise interferences or the sound is distorted.
- Is the system picking up external noise or multipath distortion?
  → Change the orientation of the antenna.
  → Move the unit away from other electrical appliances.

CASSETTE DECK SECTION

The tape does not run.
- Is the deck in pause mode? (→ page 7)

The sound is off-balance or not adequately high.
- Is the playback head dirty? (→ page 17)

Recording is not possible.
- Is the erasure prevention tab on the tape broken off? (→ page 11)
- Is the recording head dirty? (→ page 17)

Erasure is not possible.
- Is the erasure head dirty? (→ page 17)
- Is a metal tape being used?

High frequency sound is not emitted.
- Is the recording/playback head dirty? (→ page 17)

CD PLAYER SECTION

The CD player does not play.
- Is the disc correctly placed? (→ page 8)
- Is the disc dirty? (→ page 17)
- Is the lens affected by condensation?
  → Wait approximately one hour and try again.

To reset

If an unusual condition occurs in the display window, reset the unit as follows.

1 Press **POWER** to turn off the power.
2 Press **POWER** to turn the power back on while pressing ■ **CLEAR**. Everything stored in memory after purchase is cancelled.

If the power cannot be turned off in step 1 because of a malfunction, reset by disconnecting the AC cord, and connect it again. Then carry out step 2.

SPECIFICATIONS

Main unit CX-NS111/CX-NS116

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensivity (IHF)	16.8 dBf
Antenna terminals	75 ohms (unbalanced)

MW tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

LW tuner section

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

Amplifier section

Power output	Rated: 10 W + 10 W (6 ohms, T.H.D. 1%, 1 kHz/DIN 45500) Reference: 12 W + 12 W (6 ohms, T.H.D. 10%, 1 kHz/DIN 45324) DIN MUSIC POWER: 29 W + 29 W
Total harmonic distortion	0.1% (6 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 500 mV
Outputs	SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 8000 Hz
Recording system	AC bias
Heads	Deck 1: Recording/playback head × 1, erase head × 1 Deck 2: Playback head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05% (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

General

Power requirements	230 V AC, 50 Hz
Power consumption	50 W
Dimensions of main unit (W × H × D)	260 × 324 × 349.5 mm
Weight of main unit	4.9 kg

Speaker system SX-NS112/SX-NS116

Cabinet type	2 way, bass reflex (magnetic shielded type)
Speakers	Woofer: 120 mm cone type Tweeter: 20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	86 dB/W/m
Dimensions (W × H × D)	220 × 324 × 235mm
Weight	2.0 kg

Specifications and external appearance are subject to change without notice.

COPYRIGHT

Please check the laws on copyright relating to recordings from discs, radio or external tape for the country in which the machine is being used.

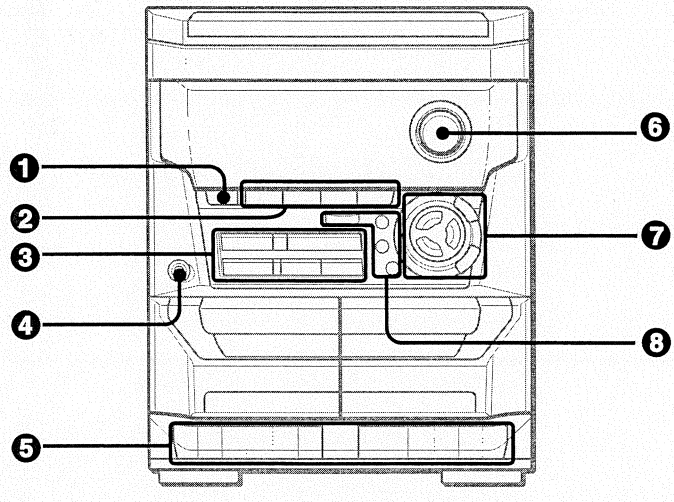
OBSERVERA

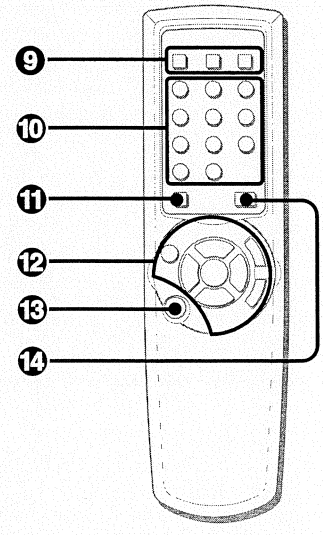
Så länge som apparaten är ansluten till nätet flyter en svag ström genom densamma, även då den är avstängd. Om man under en längre tid ej har för avsikt att använda den, drag då ur nätkabeln.

BEMÆRK

Apparatet er stadig forbundet med lysnettet, så længe stikket er tilsluttet til stikkontakten, selv om afbryteren er slået fra. Hvis apparatet ikke bruges i længere tid, skal netledningen trækkes ud.

PARTS INDEX/INDICE DE LAS PARTES/NOMENCLATURE/KENNZEICHNUNG DER BEDIENELEMENTE/INDICE DELLE PARTI/BEDIENINGSORGANEN/PŘEHLED OVLÁDACÍCH PRVKŮ/FUNKCIONÁLIS ELEMEK LISTÁJA/WYKAZ CZĘŚCI





Name/Nombre/Nom Name/Nome/Naam Název/Cím/Nazwa	Page/Página/Page Seite/Pagina/Pagina Strana/Oldalszám/Strona

❶ POWER 6,15-17

❷ TAPE 7
TUNER/BAND 10
VIDEO/AUX 16
CD 8

❸ ❚❚SET 6,8,10,11,14,15
■CLEAR 8-10,12-14
►PRESET 6,8-10
I◄◄/◄◄DOWN 6,8-10,12-15
►►I/►►UP 6,8-10,12-15

❹ PHONES 7

❺ ● 11-13
► 7
◄◄ 7
►► 7
■/≜ 7,11-13
❚❚ 7,11

❻ VOLUME 6

❼ DISC DIRECT PLAY1-3 8,9,12,13
DISC CHANGE 8
≜OPEN/CLOSE 8

❽ T-BASS 6
ROCK 7
POP 7
CLASSIC 7

Name/Nombre/Nom Name/Nome/Naam Název/Cím/Nazwa	Page/Página/Page Seite/Pagina/Pagina Strana/Oldalszám/Strona

❾ DISC DIRECT PLAY1-3 8,9,12,13
("4" and "5" are not be used in your system.)
❿ 0-9,+10 5,8-10,12,13
1/CD EDIT/CHECK 8,12,13
2/PRGM 9
3/RANDOM/REPEAT 9
4/GEQ 7
6/T-BASS 6
7/TIMER 15
8/SLEEP 14
9/CLOCK 6,14
0/MONO TUNER 10,11
+10/BAND 10

⓫ SHIFT 5

⓬ ❚❚SET 6,8,10,11,14,15
I◄◄/◄◄DOWN 6,8-10,12-15
►►I/►►UP 6,8-10,12-15
■CLEAR 8-10,12-14
►PRESET 6,8-10
VOL(∧, ∨) 6

⓭ POWER 6,15-17

⓮ FUNCTION 5

AIWA CO.,LTD.